

AUTOMOBILE

Application: Electric Traction (aArtega)



E-Traction for automobiles is increasingly in demand.

The electric motor has the advantage of compactness and high efficiency.

For this project MACCON was invited to support a demonstration of a rear-axle based drive system.

Project: aArtega

Two independent motors and drives are mounted next to the rear axle, with the power electronics between them. The output of the motors is linked to the two rear-axle half-shafts by a spur-gear 5:1 reduction. The solution is compact and has the special advantage that the mechanical differential is replaced

by simple electronic control: different torque levels commands can be sent to each motor, depending on driving and steering conditions.

MACCON contribution

For this demonstration power train system MACCON developed special IPM traction motors, each with a peak power of 60kW.

Resolver feedback ensures exact position feedback to the controllers.

The motors operate over a wide voltage range: 250 to 400V.

